

ANNUAL INDEX

The following index lists all the authors and articles that appeared in *SCIENTIFIC AMERICAN* during 1982. Also indexed are "Metamagical Themes" and "The Amateur Scientist."

AUTHORS

- Bahcall, John N., and Lyman Spitzer, Jr. THE SPACE TELESCOPE; July, page 40.
- Bechgaard, Klaus, and Denis Jérôme. ORGANIC SUPERCONDUCTORS; July, page 52.
- Beck, Myrl, David L. Jones, Allan Cox and Peter Coney. THE GROWTH OF WESTERN NORTH AMERICA; November, page 70.
- Beddington, John R., and Robert M. May. THE HARVESTING OF INTERACTING SPECIES IN A NATURAL ECOSYSTEM; November, page 62.
- Begelman, Mitchell C., Roger D. Blandford and Martin J. Rees. COSMIC JETS; May, page 116.
- Bernard, Paul. AN ANCIENT GREEK CITY IN CENTRAL ASIA; January, page 148.
- Bishop, J. Michael. ONCOGENES; March, page 80.
- Blandford, Roger D., Mitchell C. Begelman and Martin J. Rees. COSMIC JETS; May, page 116.
- Blitz, Leo. GIANT MOLECULAR-CLOUD COMPLEXES IN THE GALAXY; April, page 84.
- Bloom, Elliott D., and Gary J. Feldman. QUARKONIUM; May, page 66.
- Blouke, Morley, and Jerome Kristian. CHARGE-COUPLED DEVICES IN ASTRONOMY; October, page 66.
- Boss, Kenneth J., and Clyde F. E. Roper. THE GIANT SQUID; April, page 96.
- Brandel, Sarah K., and Davidson R. Gwatkin. LIFE EXPECTANCY AND POPULATION GROWTH IN THE THIRD WORLD; May, page 57.
- Brierley, Corale L. MICROBIOLOGICAL MINING; August, page 44.
- Buisseret, Paul D. ALLERGY; August, page 86.
- Byck, Robert, and Craig Van Dyke. COCAINE; March, page 128.
- Carrigan, Jr., Richard A., and W. Peter Trower. SUPERHEAVY MAGNETIC MONOPOLES; April, page 106.
- Cheung, Wai Yiu. CALMODULIN; June, page 62.
- Cline, David B., Carlo Rubbia and Simon van der Meer. THE SEARCH FOR INTERMEDIATE VECTOR BOSONS; March, page 48.
- Cohen, Marvin L., Volker Heine and James C. Phillips. THE QUANTUM MECHANICS OF MATERIALS; June, page 82.
- Coney, Peter, David L. Jones, Allan Cox and Myrl Beck. THE GROWTH OF WESTERN NORTH AMERICA; November, page 70.
- Constantine-Paton, Martha, and Margaret I. Law. THE DEVELOPMENT OF MAPS AND STRIPES IN THE BRAIN; December, page 62.
- Cox, Allan, David L. Jones, Peter Coney and Myrl Beck. THE GROWTH OF WESTERN NORTH AMERICA; November, page 70.
- Crews, David, and William R. Garstka. THE ECOLOGICAL PHYSIOLOGY OF A GARTER SNAKE; November, page 158.
- de Boer, Klaas S., and Blair D. Savage. THE CORONAS OF GALAXIES; August, page 54.
- Elachi, Charles. RADAR IMAGES OF THE EARTH FROM SPACE; December, page 54.
- Ellers, Fred S. ADVANCED OFFSHORE OIL PLATFORMS; April, page 38.
- Ernst, Martin L. THE MECHANIZATION OF COMMERCE; September, page 132.
- Evernden, Jack F., and Lynn R. Sykes. THE VERIFICATION OF A COMPREHENSIVE NUCLEAR TEST BAN; October, page 47.
- Feldman, Gary J., and Elliott D. Bloom. QUARKONIUM; May, page 66.
- Fitch, Cleo Rickman. THE LAMPS OF COSA; December, page 148.
- Forsberg, Randall. A BILATERAL NUCLEAR-WEAPON FREEZE; November, page 52.
- Gardiner, Jr., William C. THE CHEMISTRY OF FLAMES; February, page 110.
- Garoff, Henrik, Kai Simons and Ari Helenius. HOW AN ANIMAL VIRUS GETS INTO AND OUT OF ITS HOST CELL; February, page 58.
- Garstka, William R., and David Crews. THE ECOLOGICAL PHYSIOLOGY OF A GARTER SNAKE; November, page 158.
- Gass, Ian G. OPHIOLITES; August, page 122.
- Gilbert, Lawrence E. THE COEVOLUTION OF A BUTTERFLY AND A VINE; August, page 110.
- Gingerich, Owen. THE GALILEO AFFAIR; August, page 132.
- Ginzberg, Eli. THE SOCIAL SECURITY SYSTEM; January, page 51.
- Ginzberg, Eli. THE MECHANIZATION OF WORK; September, page 66.
- Gittelsohn, Alan, and John Wennberg. VARIATIONS IN MEDICAL CARE AMONG SMALL AREAS; April, page 120.
- Giuliano, Vincent E. THE MECHANIZATION OF OFFICE WORK; September, page 148.
- Goldberg, Michael E., Robert H. Wurtz and David Lee Robinson. BRAIN MECHANISMS OF VISUAL ATTENTION; June, page 124.
- Gomer, Robert. SURFACE DIFFUSION; August, page 98.
- Gregory, Stephen A., and Laird A. Thompson. SUPERCLUSTERS AND VOIDS IN THE DISTRIBUTION OF GALAXIES; March, page 106.
- Gunn, Thomas G. THE MECHANIZATION OF DESIGN AND MANUFACTURING; September, page 114.
- Gupta, Amar, and Hoo-min D. Toong. PERSONAL COMPUTERS; December, page 86.
- Gwatkin, Davidson R., and Sarah K. Brandel. LIFE EXPECTANCY AND POPULATION GROWTH IN THE THIRD WORLD; May, page 57.
- Hartline, Peter H., and Eric A. Newman. THE INFRARED "VISION" OF SNAKES; March, page 116.
- Hay, Richard L., and Mary D. Leakey. THE FOSSIL FOOTPRINTS OF LAETOLI; February, page 50.
- Heine, Volker, Marvin L. Cohen and James C. Phillips. THE QUANTUM MECHANICS OF MATERIALS; June, page 82.
- Helenius, Ari, Kai Simons and Henrik Garoff. HOW AN ANIMAL VIRUS GETS INTO AND OUT OF ITS HOST CELL; February, page 58.
- Ishikawa, Kenzo. GLUEBALLS; November, page 142.
- Jérôme, Denis, and Klaus Bechgaard. ORGANIC SUPERCONDUCTORS; July, page 52.
- Johansen, Kaj. ANEURYSMS; July, page 110.
- Johnson, Alexander D., Mark Ptashne and Carl O. Pabo. A GENETIC SWITCH IN A BACTERIAL VIRUS; November, page 128.
- Johnson, Torrence V., and Laurence A. Soderblom. THE MOONS OF SATURN; January, page 100.
- Johnston, Arch C. A MAJOR EARTHQUAKE ZONE ON THE MISSISSIPPI; April, page 60.
- Jones, David L., Allan Cox, Peter Coney and Myrl Beck. THE GROWTH OF WESTERN NORTH AMERICA; November, page 70.
- Kahneman, Daniel, and Amos Tversky. THE PSYCHOLOGY OF PREFERENCES; January, page 160.
- Karhnak, John M., and Robert L. Marrolli. THE MECHANIZATION OF MINING; September, page 90.
- Keely, Charles B. ILLEGAL MIGRATION; March, page 41.
- Koehl, M. A. R. THE INTERACTION OF MOVING WATER AND SESSILE ORGANISMS; December, page 124.
- Kristian, Jerome, and Morley Blouke. CHARGE-COUPLED DEVICES IN ASTRONOMY; October, page 66.
- Lada, Charles J. ENERGETIC OUTFLOWS FROM YOUNG STARS; July, page 82.
- Lada, Edward R. THE FIRST NUCLEAR INDUSTRY; November, page 180.
- La Rocca, Aldo V. LASER APPLICATIONS IN MANUFACTURING; March, page 94.
- Law, Margaret I., and Martha Constantine-Paton. THE DEVELOPMENT OF MAPS AND STRIPES IN THE BRAIN;

ANNUAL INDEX

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AUTHORS

- Bahcall, John N., and Lyman Spitzer, Jr. THE SPACE TELESCOPE; July, page 40.
- Bechgaard, Klaus, and Denis Jérôme. ORGANIC SUPERCONDUCTORS; July, page 52.
- Beck, Myrl, David L. Jones, Allan Cox and Peter Coney. THE GROWTH OF WESTERN NORTH AMERICA; November, page 70.
- Beddington, John R., and Robert M. May. THE HARVESTING OF INTERACTING SPECIES IN A NATURAL ECOSYSTEM; November, page 62.
- Begelman, Mitchell C., Roger D. Blandford and Martin J. Rees. COSMIC JETS; May, page 116.
- Bernard, Paul. AN ANCIENT GREEK CITY IN CENTRAL ASIA; January, page 148.
- Bishop, J. Michael. ONCOGENES; March, page 80.
- Blandford, Roger D., Mitchell C. Begelman and Martin J. Rees. COSMIC JETS; May, page 116.
- Blitz, Leo. GIANT MOLECULAR-CLOUD COMPLEXES IN THE GALAXY; April, page 84.
- Bloom, Elliott D., and Gary J. Feldman. QUARKONIUM; May, page 66.
- Blouke, Morley, and Jerome Kristian. CHARGE-COUPLED DEVICES IN ASTRONOMY; October, page 66.
- Boss, Kenneth J., and Clyde F. E. Roper. THE GIANT SQUID; April, page 96.
- Brandel, Sarah K., and Davidson R. Gwatkin. LIFE EXPECTANCY AND POPULATION GROWTH IN THE THIRD WORLD; May, page 57.
- Brierley, Corale L. MICROBIOLOGICAL MINING; August, page 44.
- Buisseret, Paul D. ALLERGY; August, page 86.
- Byck, Robert, and Craig Van Dyke. COCAINE; March, page 128.
- Carrigan, Jr., Richard A., and W. Peter Trower. SUPERHEAVY MAGNETIC MONOPOLES; April, page 106.
- Cheung, Wai Yiu. CALMODULIN; June, page 62.
- Cline, David B., Carlo Rubbia and Simon van der Meer. THE SEARCH FOR INTERMEDIATE VECTOR BOSONS; March, page 48.
- Cohen, Marvin L., Volker Heine and James C. Phillips. THE QUANTUM MECHANICS OF MATERIALS; June, page 82.
- Coney, Peter, David L. Jones, Allan Cox and Myrl Beck. THE GROWTH OF WESTERN NORTH AMERICA; November, page 70.
- Constantine-Paton, Martha, and Margaret I. Law. THE DEVELOPMENT OF MAPS AND STRIPES IN THE BRAIN; December, page 62.
- Cox, Allan, David L. Jones, Peter Coney and Myrl Beck. THE GROWTH OF WESTERN NORTH AMERICA; November, page 70.
- Crews, David, and William R. Garstka. THE ECOLOGICAL PHYSIOLOGY OF A GARTER SNAKE; November, page 158.
- de Boer, Klaas S., and Blair D. Savage. THE CORONAS OF GALAXIES; August, page 54.
- Elachi, Charles. RADAR IMAGES OF THE EARTH FROM SPACE; December, page 54.
- Ellers, Fred S. ADVANCED OFFSHORE OIL PLATFORMS; April, page 38.
- Ernst, Martin L. THE MECHANIZATION OF COMMERCE; September, page 132.
- Evernden, Jack F., and Lynn R. Sykes. THE VERIFICATION OF A COMPREHENSIVE NUCLEAR TEST BAN; October, page 47.
- Feldman, Gary J., and Elliott D. Bloom. QUARKONIUM; May, page 66.
- Fitch, Cleo Rickman. THE LAMPS OF COSA; December, page 148.
- Forsberg, Randall. A BILATERAL NUCLEAR-WEAPON FREEZE; November, page 52.
- Gardiner, Jr., William C. THE CHEMISTRY OF FLAMES; February, page 110.
- Garoff, Henrik, Kai Simons and Ari Helenius. HOW AN ANIMAL VIRUS GETS INTO AND OUT OF ITS HOST CELL; February, page 58.
- Garstka, William R., and David Crews. THE ECOLOGICAL PHYSIOLOGY OF A GARTER SNAKE; November, page 158.
- Gass, Ian G. OPHIOLITES; August, page 122.
- Gilbert, Lawrence E. THE COEVOLUTION OF A BUTTERFLY AND A VINE; August, page 110.
- Gingerich, Owen. THE GALILEO AFFAIR; August, page 132.
- Ginzberg, Eli. THE SOCIAL SECURITY SYSTEM; January, page 51.
- Ginzberg, Eli. THE MECHANIZATION OF WORK; September, page 66.
- Gittelsohn, Alan, and John Wennberg. VARIATIONS IN MEDICAL CARE AMONG SMALL AREAS; April, page 120.
- Giuliano, Vincent E. THE MECHANIZATION OF OFFICE WORK; September, page 148.
- Goldberg, Michael E., Robert H. Wurtz and David Lee Robinson. BRAIN MECHANISMS OF VISUAL ATTENTION; June, page 124.
- Gomer, Robert. SURFACE DIFFUSION; August, page 98.
- Gregory, Stephen A., and Laird A. Thompson. SUPERCLUSTERS AND VOIDS IN THE DISTRIBUTION OF GALAXIES; March, page 106.
- Gunn, Thomas G. THE MECHANIZATION OF DESIGN AND MANUFACTURING; September, page 114.
- Gupta, Amar, and Hoo-min D. Toong. PERSONAL COMPUTERS; December, page 86.
- Gwatkin, Davidson R., and Sarah K. Brandel. LIFE EXPECTANCY AND POPULATION GROWTH IN THE THIRD WORLD; May, page 57.
- Hartline, Peter H., and Eric A. Newman. THE INFRARED "VISION" OF SNAKES; March, page 116.
- Hay, Richard L., and Mary D. Leakey. THE FOSSIL FOOTPRINTS OF LAETOLI; February, page 50.
- Heine, Volker, Marvin L. Cohen and James C. Phillips. THE QUANTUM MECHANICS OF MATERIALS; June, page 82.
- Helenius, Ari, Kai Simons and Henrik Garoff. HOW AN ANIMAL VIRUS GETS INTO AND OUT OF ITS HOST CELL; February, page 58.
- Ishikawa, Kenzo. GLUEBALLS; November, page 142.
- Jérôme, Denis, and Klaus Bechgaard. ORGANIC SUPERCONDUCTORS; July, page 52.
- Johansen, Kaj. ANEURYSMS; July, page 110.
- Johnson, Alexander D., Mark Ptashne and Carl O. Pabo. A GENETIC SWITCH IN A BACTERIAL VIRUS; November, page 128.
- Johnson, Torrence V., and Laurence A. Soderblom. THE MOONS OF SATURN; January, page 100.
- Johnston, Arch C. A MAJOR EARTHQUAKE ZONE ON THE MISSISSIPPI; April, page 60.
- Jones, David L., Allan Cox, Peter Coney and Myrl Beck. THE GROWTH OF WESTERN NORTH AMERICA; November, page 70.
- Kahneman, Daniel, and Amos Tversky. THE PSYCHOLOGY OF PREFERENCES; January, page 160.
- Karhnak, John M., and Robert L. Marrolli. THE MECHANIZATION OF MINING; September, page 90.
- Keely, Charles B. ILLEGAL MIGRATION; March, page 41.
- Koehl, M. A. R. THE INTERACTION OF MOVING WATER AND SESSILE ORGANISMS; December, page 124.
- Kristian, Jerome, and Morley Blouke. CHARGE-COUPLED DEVICES IN ASTRONOMY; October, page 66.
- Lada, Charles J. ENERGETIC OUTFLOWS FROM YOUNG STARS; July, page 82.
- Lada, Edward R. THE FIRST NUCLEAR INDUSTRY; November, page 180.
- La Rocca, Aldo V. LASER APPLICATIONS IN MANUFACTURING; March, page 94.
- Law, Margaret I., and Martha Constantine-Paton. THE DEVELOPMENT OF MAPS AND STRIPES IN THE BRAIN;

- December, page 62.
- Leakey, Mary D., and Richard L. Hay. THE FOSSIL FOOTPRINTS OF LAETOLI; February, page 50.
- Leder, Philip. THE GENETICS OF ANTIBODY DIVERSITY; May, page 102.
- Leontief, Wassily W. THE DISTRIBUTION OF WORK AND INCOME; September, page 188.
- Leroi-Gourhan, Arlette. THE ARCHAEOLOGY OF LASCAUX CAVE; June, page 104.
- Levine, Joseph S., and Edward F. MacNichol, Jr. COLOR VISION IN FISHES; February, page 140.
- Levine, Ronald D. SUPERCOMPUTERS; January, page 136.
- Ligon, J. David, and Sandra H. Ligon. THE COOPERATIVE BREEDING BEHAVIOR OF THE GREEN WOODHOOPOE; July, page 126.
- Ligon, Sandra H., and J. David Ligon. THE COOPERATIVE BREEDING BEHAVIOR OF THE GREEN WOODHOOPOE; July, page 126.
- Llinás, Rodolfo R. CALCIUM IN SYNAPTIC TRANSMISSION; October, page 56.
- Lynch, David K. TIDAL BORES; October, page 146.
- MacNichol, Jr., Edward F., and Joseph S. Levine. COLOR VISION IN FISHES; February, page 140.
- Markowski, Michael A. ULTRALIGHT AIRPLANES; July, page 62.
- Marovelli, Robert L., and John M. Karhnak. THE MECHANIZATION OF MINING; September, page 90.
- May, Robert M., and John R. Beddington. THE HARVESTING OF INTERACTING SPECIES IN A NATURAL ECOSYSTEM; November, page 62.
- Mewaldt, Richard A., Edward C. Stone and Mark E. Wiedenbeck. SAMPLES OF THE MILKY WAY; December, page 108.
- Moore, A. D. HENRY A. ROWLAND; February, page 150.
- Moyer, Gordon. THE GREGORIAN CALENDAR; May, page 144.
- Newman, Eric A., and Peter H. Hartline. THE INFRARED "VISION" OF SNAKES; March, page 116.
- Osmer, Patrick S. QUASARS AS PROBES OF THE DISTANT AND EARLY UNIVERSE; February, page 126.
- Owen, Tobias. TITAN; February, page 98.
- Pabo, Carl O., Mark Ptashne and Alexander D. Johnson. A GENETIC SWITCH IN A BACTERIAL VIRUS; November, page 128.
- Partridge, Brian L. THE STRUCTURE AND FUNCTION OF FISH SCHOOLS; June, page 114.
- Phillips, James C., Marvin L. Cohen and Volker Heine. THE QUANTUM MECHANICS OF MATERIALS; June, page 82.
- Policansky, David. THE ASYMMETRY OF FLOUNDERS; May, page 124.
- Pomerance, Carl. THE SEARCH FOR PRIME NUMBERS; December, page 136.
- Ptashne, Mark, Alexander D. Johnson and Carl O. Pabo. A GENETIC SWITCH IN A BACTERIAL VIRUS; November, page 128.
- Pykett, Ian L. NMR IMAGING IN MEDICINE; May, page 78.
- Rasmussen, Wayne D. THE MECHANIZATION OF AGRICULTURE; September, page 76.
- Readhead, Anthony C. S. RADIO ASTRONOMY BY VERY-LONG-BASELINE INTERFEROMETRY; June, page 52.
- Rees, Martin J., Roger D. Blandford and Mitchell C. Begelman. COSMIC JETS; May, page 116.
- Revelle, Roger. CARBON DIOXIDE AND WORLD CLIMATE; August, page 35.
- Ritchie-Calder, Lord. THE LUNAR SOCIETY OF BIRMINGHAM; June, page 136.
- Robinson, David Lee, Robert H. Wurtz and Michael E. Goldberg. BRAIN MECHANISMS OF VISUAL ATTENTION; June, page 124.
- Roper, Clyde F. E., and Kenneth J. Boss. THE GIANT SQUID; April, page 96.
- Rosensweig, Ronald E. MAGNETIC FLUIDS; October, page 136.
- Rossing, Thomas D. THE PHYSICS OF KETTLEDRUMS; November, page 172.
- Rothman, Tony. THE SHORT LIFE OF EVARISTE GALOIS; April, page 136.
- Rubbia, Carlo, David B. Cline and Simon van der Meer. THE SEARCH FOR INTERMEDIATE VECTOR BOSONS; March, page 48.
- Russell, Dale A. THE MASS EXTINCTIONS OF THE LATE MESOZOIC; January, page 58.
- Savage, Blair D., and Klaas S. de Boer. THE CORONAS OF GALAXIES; August, page 54.
- Scott, Joan Wallach. THE MECHANIZATION OF WOMEN'S WORK; September, page 166.
- Seeley, Thomas D. HOW HONEYBEES FIND A HOME; October, page 158.
- Sheldon, Richard P. PHOSPHATE ROCK; June, page 45.
- Shepard, James F. THE REGENERATION OF POTATO PLANTS FROM LEAF-CELL PROTOPLASTS; May, page 154.
- Silvera, Isaac F., and Jook Walraven. THE STABILIZATION OF ATOMIC HYDROGEN; January, page 66.
- Simons, Kai, Henrik Garoff and Ari Helenius. HOW AN ANIMAL VIRUS GETS INTO AND OUT OF ITS HOST CELL; February, page 58.
- Soderblom, Laurence A., and Torrence V. Johnson. THE MOONS OF SATURN; January, page 100.
- Spitzer, Jr., Lyman, and John N. Bahcall. THE SPACE TELESCOPE; July, page 40.
- Stent, Gunther S., and David A. Weisblat. THE DEVELOPMENT OF A SIMPLE NERVOUS SYSTEM; January, page 118.
- Stephenson, F. Richard. HISTORICAL ECLIPSES; October, page 170.
- Stone, Edward C., Richard A. Mewaldt and Mark E. Wiedenbeck. SAMPLES OF THE MILKY WAY; December, page 108.
- Sykes, Lynn R., and Jack F. Evernden. THE VERIFICATION OF A COMPREHENSIVE NUCLEAR TEST BAN; October, page 47.
- Thompson, Laird A., and Stephen A. Gregory. SUPERCLUSTERS AND VOIDS IN THE DISTRIBUTION OF GALAXIES; March, page 106.
- Toong, Hoo-min D., and Amar Gupta. PERSONAL COMPUTERS; December, page 86.
- Tormey, Alan, and Judith Farr Tormey. RENAISSANCE INTARSIA: THE ART OF GEOMETRY; July, page 136.
- Tormey, Judith Farr, and Alan Tormey. RENAISSANCE INTARSIA: THE ART OF GEOMETRY; July, page 136.
- Trower, W. Peter, and Richard A. Carriagan, Jr. SUPERHEAVY MAGNETIC MONOPOLES; April, page 106.
- Tversky, Amos, and Daniel Kahneman. THE PSYCHOLOGY OF PREFERENCES; January, page 160.
- Upton, Arthur C. THE BIOLOGICAL EFFECTS OF LOW-LEVEL IONIZING RADIATION; February, page 41.
- van der Meer, Simon, David B. Cline and Carlo Rubbia. THE SEARCH FOR INTERMEDIATE VECTOR BOSONS; March, page 48.
- Van Dyke, Craig, and Robert Byck. COCAINE; March, page 128.
- Vining, Jr., Daniel R. MIGRATION BETWEEN THE CORE AND THE PERIPHERY; December, page 44.
- Walraven, Jook, and Isaac F. Silvera. THE STABILIZATION OF ATOMIC HYDROGEN; January, page 66.
- Waltz, David L. ARTIFICIAL INTELLIGENCE; October, page 118.
- Wang, James C. DNA TOPOISOMERASES; July, page 94.
- Weisblat, David A., and Gunther S. Stent. THE DEVELOPMENT OF A SIMPLE NERVOUS SYSTEM; January, page 118.
- Wennberg, John, and Alan Gittelsohn. VARIATIONS IN MEDICAL CARE AMONG SMALL AREAS; April, page 120.
- Wiebe, Peter H. RINGS OF THE GULF STREAM; March, page 60.
- Wiedenbeck, Mark E., Richard A. Mewaldt and Edward C. Stone. SAMPLES OF THE MILKY WAY; December, page 108.
- Wurtzman, Richard J. NUTRIENTS THAT MODIFY BRAIN FUNCTION; April, page 50.
- Wurtzman, Robert H., Michael E. Goldberg and David Lee Robinson. BRAIN MECHANISMS OF VISUAL ATTENTION; June, page 124.

ARTICLES

AIRPLANES, ULTRALIGHT, by Michael A. Markowski; July, page 62.



ALLERGY, by Paul D. Buisseret; August, page 86.
ANEURYSMS, by Kaj Johansen; July, page 110.

ANTIBODY DIVERSITY, THE GENETICS OF, by Philip Leder; May, page 102.

ARTIFICIAL INTELLIGENCE, by David L. Waltz; October, page 118.

BORES, TIDAL, by David K. Lynch; October, page 146.

BRAIN FUNCTION, NUTRIENTS THAT MODIFY, by Richard J. Wurtman; April, page 50.

CALENDAR, THE GREGORIAN, by Gordon Moyer; May, page 144.

CALMODULIN, by Wai Yiu Cheung; June, page 62.

CARBON DIOXIDE AND WORLD CLIMATE, by Roger Revelle; August, page 35.

CHARGE-COUPLED DEVICES IN ASTRONOMY, by Jerome Kristian and Morley Blouke; October, page 66.

CLIMATE, CARBON DIOXIDE AND WORLD, by Roger Revelle; August, page 35.

COCAINE, by Craig Van Dyke and Robert Byck; March, page 128.

COEVOLUTION OF A BUTTERFLY AND A VINE, THE, by Lawrence E. Gilbert; August, page 110.

COMPUTERS, PERSONAL, by Hoo-min D. Toong and Amar Gupta; December, page 86.

COSA, THE LAMPS OF, by Cleo Rickman Fitch; December, page 148.

COSMIC JETS, by Roger D. Blandford, Mitchell C. Begelman and Martin J. Rees; May, page 116.

DIFFUSION, SURFACE, by Robert Gomer; August, page 98.

DNA TOPOISOMERASES, by James C. Wang; July, page 94.

EARTHQUAKE ZONE ON THE MISSISSIPPI, A MAJOR, by Arch C. Johnston; April, page 60.

ECLIPSES, HISTORICAL, by F. Richard Stephenson; October, page 170.

ECOLOGICAL PHYSIOLOGY OF A GARTER SNAKE, THE, by David Crews and William R. Garstka; November, page 158.

ECOSYSTEM, THE HARVESTING OF INTERACTING SPECIES IN A NATURAL, by John R. Beddington and Robert M. May; November, page 62.

FISH SCHOOLS, THE STRUCTURE AND FUNCTION OF, by Brian L. Partridge; June, page 114.

FLAMES, THE CHEMISTRY OF, by William C. Gardiner, Jr.; February, page 110.

FLOUNDERS, THE ASYMMETRY OF, by David Policansky; May, page 124.

GALAXIES, SUPERCLUSTERS AND VOIDS IN THE DISTRIBUTION OF, by Stephen A. Gregory and Laird A. Thompson; March, page 106.

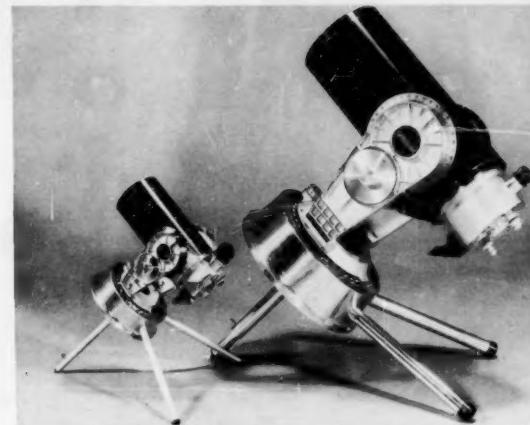
GALAXIES, THE CORONAS OF, by Klaas S. de Boer and Blair D. Savage; August, page 54.

GALAXY, GIANT MOLECULAR-CLOUD COMPLEXES IN THE, by Leo Blitz; April,

FOR THE LOVER OF FINE INSTRUMENTS . . .

The Questar family of telescopes

© Questar Corporation, 1977



Because Questar's inventor loved fine instruments, he designed Questar for himself. He had begun dreaming about the kind of telescope he someday wanted to own, long before such a thing was considered a possibility.

To begin with, of course, there was to be a set of optics so fine that no amount of money, time, or human effort could improve upon it. Second, since he believed that the use of a telescope should not be a difficult physical chore, the size was extremely important: it should be easily portable. Preferably it would be small enough to be used on a table, where a person could sit in a relaxed position to observe and be able to have a writing surface at hand. And since he planned to carry it in his travels, it would be packaged handsomely in a piece of leather luggage.

Third, the accessories which were necessary for the enjoyment of a telescope were to be built in and should have fingertip controls within easy reach.

Fourth, the mechanical design must incorporate a means of putting the telescope into its polar equatorial position at a moment's notice and without the need of a separate tripod.

Fifth, the versatility that he visualized would make this instrument equally suitable for nature studies in the field. It also should be able to focus on close objects, which no other telescope in the world could do.

Sixth, the design must be photovisual so that he could record on film whatever these superior optics would present to the eye.

And finally, the instrument must be of rugged construction and vibrationless, without the aggravating oscillations of long-tubed conventional telescopes.

* * *

As we have said, this was the dream, but one lacking the possibility of fulfillment within the state of the art at that time. However, in the 1940's an important discovery in optics occurred. When Maksutov published, in the *Journal of the Optical Society of America*, a paper on his mixed lens-mirror, or catadioptric, system, it was immediately apparent to Questar's designer, Lawrence Braymer, that this break-through in optics would make possible a miniaturized version of the astronomical telescope which he had for so long wanted to build.

The Questar telescope reached the market in 1954: 3.5 inches of aperture with a 7-foot focal length in a sealed tube only 8 inches long, and with all the built-in conveniences that he had planned. These included a wide-field finder, power changes without changing eyepieces, smooth man-

ual controls in altitude and azimuth, safety clutches, setting circles, a sidereal clock, and synchronous motor drive. Moreover, a totally safe solar filter had become an additional feature created for the solar observer.

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- page 84.
- GALILEO AFFAIR, THE, by Owen Gingrich; August, page 132.
- GALOIS, THE SHORT LIFE OF ÉVARISTE, by Tony Rothman; April, page 136.
- GENETIC SWITCH IN A BACTERIAL VIRUS, A, by Mark Ptashne, Alexander D. Johnson and Carl O. Pabo; November, page 128.
- GLUEBALLS, by Kenzo Ishikawa; November, page 142.
- GREEK CITY IN CENTRAL ASIA, AN ANCIENT, by Paul Bernard; January, page 148.
- GREEN WOODHOOPOE, THE COOPERATIVE BREEDING BEHAVIOR OF THE, by J. David Ligon and Sandra H. Ligon; July, page 126.
- GREGORIAN CALENDAR, THE, by Gordon Moyer; May, page 144.
- GULF STREAM, RINGS OF THE, by Peter H. Wiebe; March, page 60.
- HONEYBEES FIND A HOME, HOW, by Thomas D. Seeley; October, page 158.
- HYDROGEN, THE STABILIZATION OF ATOMIC, by Isaac F. Silvera and Jook Walraven; January, page 66.
- INTARSIA: THE ART OF GEOMETRY, RENAISSANCE, by Alan Tormey and Judith Farr Tormey; July, page 136.
- INTERMEDIATE VECTOR BOSONS, THE SEARCH FOR, by David B. Cline, Carlo Rubbia and Simon van der Meer; March, page 48.
- IONIZING RADIATION, THE BIOLOGICAL EFFECTS OF LOW-LEVEL, by Arthur C. Upton; February, page 41.
- KETTLEDRUMS, THE PHYSICS OF, by Thomas D. Rossing; November, page 172.
- LAETOLI, THE FOSSIL FOOTPRINTS OF, by Richard L. Hay and Mary D. Leakey; February, page 50.
- LAMPS OF COSA, THE, by Cleo Rickman Fitch; December, page 148.
- LASCAUX CAVE, THE ARCHAEOLOGY OF, by Arlette Leroi-Gourhan; June, page 104.
- LASER APPLICATIONS IN MANUFACTURING, by Aldo V. La Rocca; March, page 94.
- LUNAR SOCIETY OF BIRMINGHAM, THE, by Lord Ritchie-Calder; June, page 136.
- MAGNETIC FLUIDS, by Ronald E. Rosenzweig; October, page 136.
- MAGNETIC MONOPOLES, SUPERHEAVY, by Richard A. Carrigan, Jr., and W. Peter Trower; April, page 106.
- MASS EXTINCTIONS OF THE LATE MESOZOIC, THE, by Dale A. Russell; January, page 58.
- MECHANIZATION OF AGRICULTURE, THE, by Wayne D. Rasmussen; September, page 76.
- MECHANIZATION OF COMMERCE, THE, by Martin L. Ernst; September, page 132.
- MECHANIZATION OF DESIGN AND MANUFACTURING, THE, by Thomas G. Gunn; September, page 114.
- MECHANIZATION OF MINING, THE, by Robert L. Marovelli and John M. Karhnak; September, page 90.
- MECHANIZATION OF OFFICE WORK, THE, by Vincent E. Giuliano; September, page 148.
- MECHANIZATION OF WOMEN'S WORK, THE, by Joan Wallach Scott; September, page 166.
- MECHANIZATION OF WORK, THE, by Eli Ginzberg; September, page 66.
- MEDICAL CARE AMONG SMALL AREAS, VARIATIONS IN, by John Wennberg and Alan Gittelsohn; April, page 120.
- MICROBIOLOGICAL MINING, by Corale L. Brierley; August, page 44.
- MIGRATION BETWEEN THE CORE AND THE PERIPHERY, by Daniel R. Vining, Jr.; December, page 44.
- MIGRATION, ILLEGAL, by Charles B. Keeley; March, page 41.
- MILKY WAY, SAMPLES OF THE, by Richard A. Mewaldt, Edward C. Stone and Mark E. Wiedenbeck; December, page 108.
- MINING, MICROBIOLOGICAL, by Corale L. Brierley; August, page 44.
- NERVOUS SYSTEM, THE DEVELOPMENT OF A SIMPLE, by Gunther S. Stent and David A. Weisblat; January, page 118.
- NMR IMAGING IN MEDICINE, by Ian I. Pykett; May, page 78.
- NUCLEAR INDUSTRY, THE FIRST, by Edward R. Landa; November, page 180.
- NUCLEAR TEST BAN, THE VERIFICATION OF A COMPREHENSIVE, by Lynn R. Sykes and Jack F. Evernden; October, page 47.
- NUCLEAR-WEAPON FREEZE, A BILATERAL, by Randall Forsberg; November, page 52.
- OFFSHORE OIL PLATFORMS, ADVANCED, by Fred S. Ellers; April, page 38.
- ONCOGENES, by J. Michael Bishop; March, page 80.
- OPHIOLITES, by Ian G. Gass; August, page 122.
- OPHOSPHATE ROCK, by Richard P. Sheldon; June, page 45.
- POPULATION GROWTH IN THE THIRD WORLD, LIFE EXPECTANCY AND, by Davidson R. Gwatkin and Sarah K. Brandel; May, page 57.
- POTATO PLANTS FROM LEAF-CELL PROTOPLASTS, THE REGENERATION OF, by James F. Shepard; May, page 154.
- PRIME NUMBERS, THE SEARCH FOR, by Carl Pomerance; December, page 136.
- PROTOPLASTS, THE REGENERATION OF POTATO PLANTS FROM LEAF-CELL, by James F. Shepard; May, page 154.
- PSYCHOLOGY OF PREFERENCES, THE, by Daniel Kahneman and Amos Tversky; January, page 160.
- QUANTUM MECHANICS OF MATERIALS, THE, by Marvin L. Cohen, Volker Heine and James C. Phillips; June, page 82.
- QUARKONIUM, by Elliott D. Bloom and Gary J. Feldman; May, page 66.
- QUASARS AS PROBES OF THE DISTANT AND EARLY UNIVERSE, by Patrick S. Osmer; February, page 126.
- RADAR IMAGES OF THE EARTH FROM SPACE, by Charles Elachi; December, page 54.
- ROWLAND, HENRY A., by A. D. Moore; February, page 150.
- SATURN, THE MOONS OF, by Laurence A. Soderblom and Torrence V. Johnson; January, page 100.
- SOCIAL SECURITY SYSTEM, THE, by Eli Ginzberg; January, page 51.
- SPACE TELESCOPE, THE, by John N. Bahcall and Lyman Spitzer, Jr.; July, page 40.
- QUADRATIC, THE GIANT, by Clyde F. E. Roper and Kenneth J. Boss; April, page 96.
- STARS, ENERGETIC OUTFLOWS FROM YOUNG, by Charles J. Lada; July, page 82.
- STRIPES IN THE BRAIN, THE DEVELOPMENT OF MAPS AND, by Martha Constantine-Paton and Margaret I. Law; December, page 62.
- SUPERCOMPUTERS, by Ronald D. Levine; January, page 136.
- SUPERCONDUCTORS, ORGANIC, by Klaus Bechgaard and Denis Jérôme; July, page 52.
- SYNAPTIC TRANSMISSION, CALCIUM IN, by Rodolfo R. Llinás; October, page 56.
- TIDAL BORES, by David K. Lynch; October, page 146.
- TITAN, by Tobias Owen; February, page 98.
- VERY-LONG-BASELINE INTERFEROMETRY, RADIO ASTRONOMY BY, by Anthony C. S. Readhead; June, page 52.
- VIRUS GETS INTO AND OUT OF ITS HOST CELL, HOW AN ANIMAL, by Kai Simons, Henrik Garoff and Ari Helenius; February, page 58.
- VISION IN FISHES, COLOR, by Joseph S. Levine and Edward F. MacNichol, Jr.; February, page 140.
- "VISION" OF SNAKES, THE INFRARED, by Eric A. Newman and Peter H. Hartline; March, page 116.
- VISUAL ATTENTION, BRAIN MECHANISMS OF, by Robert H. Wurtz, Michael E. Goldberg and David Lee Robinson; June, page 124.
- WATER AND SESSILE ORGANISMS, THE INTERACTION OF MOVING, by M. A. R. Koehl; December, page 124.
- WESTERN NORTH AMERICA, THE GROWTH OF, by David L. Jones, Allan Cox, Peter Coney and Myrl Beck; November, page 70.
- WORK AND INCOME, THE DISTRIBUTION OF, by Wassily W. Leontief; September, page 188.

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startle the eye. *The music of Frédéric*; April, page 16.

"Default assumptions" and their effects on writing and thinking; November, page 18.

Games of strategy, Undercut, Flaunt, Hruska, behavioral evolution and other; August, page 16.

Genetic code an arbitrary one, or would another code work as well? Is the; March, page 18.

Imagination, Variations on a theme as the essence of; October, page 20.

Inquiry: "National Enquirer" and "The Skeptical Inquirer," About two kinds of; February, page 18.

Mechanized? Can inspiration be; September, page 18.

Nomic: a heroic game that explores the reflexivity of the law. About; June, page 16.

Nonsense, but nonsense may still have its purposes. Sense makes more sense than; December, page 18.

Number numbness, or why innumeracy may be just as dangerous as illiteracy; May, page 20.

Rubik's Cube: spheres, pyramids, dodecahedrons and God knows what else; Beyond; July, page 16.

Self-reference, A Self-referential column about last January's column about; January, page 16.

THE AMATEUR SCIENTIST

Ballet maneuvers is physics. The essence of June; page 146.

"Floater": visual artifacts that result from blood cells in front of the retina; April, page 150.

Lifesaver lights up in the mouth and light takes funny bounces through a lens. In which; July, page 146.

Magnets attract other magnets in apparent perpetual motion. Motors in which; March, page 142.

Optical experiments in which spatial filtering removes the "noise" from pictures. Simple; November, page 194.

Powders are shaken, they seem to have lives of their own. When different; September, page 206.

Sand and mud stick together when they are wet. Why do particles of; January, page 174.

Sing in the shower? What makes you sound so good when you; May, page 170.

"Speckle" on a surface lit by laser light can be seen with other kinds of illumination. The; February, page 162.

Water boils is a lot more complicated than you might think. What happens when; December, page 162.

Waves and thinking on how they shape the beach. Walking on the shore, watching the; August, page 144.

"Wobbler," a coin or a cylinder that precesses as it spins. Delights of the; October, page 184.

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